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NOTICE OF ALLOWANCE AND FEE(S) DUE

72104   7590   07/28/2009

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Patent Legal Dept.
3025 Orchard Parkway
San Jose, CA 95134

EXAMINER
YODER III, CHRISS S

ART UNIT	PAPER NUMBER
2622	

DATE MAILED: 07/28/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,887	06/26/2003	Eran Steinberg	FN-102B-US	7820

TITLE OF INVENTION: PERFECTING OF DIGITAL IMAGE CAPTURE PARAMETERS WITHIN ACQUISITION DEVICES USING FACE DETECTION

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	$755	$300	$0	$1055	10/28/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: <u>Mail</u>   Mail Stop ISSUE FEE
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Alexandria, Virginia 22313-1450
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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

72104   7590   07/28/2009

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Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

_____ (Depositor's name)

_____ (Signature)

_____ (Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,887	06/26/2003	Eran Steinberg	FN-102B-US	7820

TITLE OF INVENTION: PERFECTING OF DIGITAL IMAGE CAPTURE PARAMETERS WITHIN ACQUISITION DEVICES USING FACE DETECTION

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nonprovisional	YES	$755	$300	$0	$1055	10/28/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
YODER III, CHRISS S	2622	348-222100

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,

(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____

2 _____

3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE   (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

☐ Issue Fee

☐ Publication Fee (No small entity discount permitted)

☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**

☐ A check is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)

☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____   Date _____

Typed or printed name _____   Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,887	06/26/2003	Eran Steinberg	FN-102B-US	7820

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Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 750 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 750 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

	Application No.	Applicant(s)
Notice of Allowability	10/608,887	STEINBERG ET AL.
	Examiner	Art Unit
	CHRISS S. YODER III	2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to _06/26/2009_.

2. ☒ The allowed claim(s) is/are _1-44_.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the

           International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

      Paper No./Mail Date _____ .

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☒ Information Disclosure Statements (PTO/SB/08),
   Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☐ Interview Summary (PTO-413),
   Paper No./Mail Date _____ .

7. ☐ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on June 26, 2009 has been entered.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on June 30, 2009 has been considered by the examiner.

Allowable Subject Matter

Claims 1-44 are allowed.

The following is an examiner's statement of reasons for allowance:

1.   As for **claim 1**, the prior art does not teach or fairly suggest the use of a method of enhancing parameters of a digital image as part of a post-image capture process using face detection within said captured image to achieve one or more desired image parameters, the method comprising determining default values of relative exposure or size, or both, of at least some portion of said digital image, determining the values of

one or more camera acquisition parameters, generating in-camera, capturing or

otherwise obtaining in-camera a collection of low resolution images including an image

of a face, tracking said face within said collection of low resolution images, identifying a

plurality of groups of pixels that correspond to said face within a digitally-captured main

image based on the tracking of said face within said collection of low resolution images,

and determining values corresponding to relative exposure or size, or both, of said

groups of pixels, and comparing one or more default values of relative exposure or size,

or both, with one or more captured values of relative exposure or size, or both, based

upon analysis of said image of said face, adjusting in a post-image capture process said

image parameters including adjusting said values of relative exposure or size, or both,

of said face, and removing identification of one or more of said plurality of groups of

pixels as corresponding respectively to one or more images of one or more faces, and

wherein the removing being performed by increasing a sensitivity level of said face

identifying within at least one low resolution image or said main image or both.

2.   As for **claim 5**, the prior art does not teach or fairly suggest the use of a method

of enhancing acquisition parameters of a digital image as part of an image capture

process using face detection within said captured image to achieve one or more desired

image acquisition parameters, the method comprising determining default values of one

or more image attributes of at least some portion of said digital image, determining the

values of one or more camera acquisition parameters, generating in-camera, capturing

or otherwise obtaining in-camera a collection of low resolution images including an

image of a face, tracking said face within said collection of low resolution images,

identifying a plurality of groups of pixels that correspond to said face within a digitally-

captured main image based on the tracking of said face within said collection of low

resolution images, and determining corresponding image attributes to said groups of

pixels, and comparing one or more default image attribute values with one or more

captured image attribute value based upon analysis of said image of said face, and

adjusting said camera acquisition parameters including adjusting said image attribute

values, wherein the identifying of face pixels is automatically performed by an image

processing apparatus, the method further comprising removing as a false identification

one or more of said plurality of groups of pixels as corresponding respectively to one or

more images of one or more faces, and wherein multiple groups of pixels that

correspond respectively to multiple images of faces within the digital-captured image

remain identified after the removing, the method further comprising performing

automated processing of the remaining multiple groups of pixels corresponding to the

multiple images of faces including adjusting in a post-image capture process values of

one or more parameters of each of said multiple remaining faces.

3.   As for **claim 8**, the prior art does not teach or fairly suggest the use of a method

of manually removing one or more detected faces within a processor-based digital

image acquisition device, including a method of enhancing acquisition parameters of a

digital image as part of an image capture process using face detection within said

captured image to achieve one or more desired image acquisition parameters, the

method comprising determining default values of one or more image attributes of at

least some portion of said digital image, determining the values of one or more camera

acquisition parameters, generating in-camera, capturing or otherwise obtaining in-

camera a collection of low resolution images including an image of a face, tracking said

face within said collection of low resolution images, identifying a plurality of groups of

pixels that correspond to said face within a digitally-captured main image based on the

tracking of said face within said collection of low resolution images, and determining

corresponding image attributes to said groups of pixels, and comparing one or more

default image attribute values with one or more captured image attribute value based

upon analysis of said image of said face, and adjusting said camera acquisition

parameters including adjusting said image attribute values, wherein the identifying of

face pixels is automatically performed by an image processing apparatus, the method

further comprising removing one or more of said plurality of groups of pixels that

correspond to said image of said face, and wherein the method being performed by

increasing a sensitivity level of said face identifying within at least one low resolution

image or said main image or both.

4.   As for **claim 13**, the prior art does not teach or fairly suggest the use of a method

of enhancing parameters of a digital image as part of a post-image capture process

using face detection within said captured image to achieve one or more desired image

parameters, the method comprising determining default values of relative exposure or

size, or both, of at least some portion of said digital image, determining the values of

one or more camera acquisition parameters, generating in-camera, capturing or

otherwise obtaining in-camera a collection of low resolution images including an image

of a face, tracking said face within said collection of low resolution images, identifying a

plurality of groups of pixels that correspond to said face within a digitally-captured main

image based on the tracking of said face within said collection of low resolution images,

and determining values corresponding to relative exposure or size, or both, of said

groups of pixels, and comparing one or more default values of relative exposure or size,

or both, with one or more captured values of relative exposure or size, or both, based

upon analysis of one or more low resolution images or said main image of said face or

both, adjusting in a post-image capture process said image parameters including

adjusting said values of relative exposure or size, or both, of said face, and wherein the

identifying of face pixels is automatically performed by an image processing apparatus

which receives different relative values as to estimated importance of different detected

regions that are identified as faces within one or more low resolution images or the

digitally-captured main image or both.

5.   As for **claim 15**, the prior art does not teach or fairly suggest the use of method

of digital image processing using face detection to achieve a desired image parameter,

comprising generating in-camera, capturing or otherwise obtaining in-camera a

collection of low resolution images including an image of a face, tracking said face

within said collection of low resolution images, identifying a group of pixels that

correspond to said face within a digitally-detected main image based on the tracking of

said face within said collection of low resolution images, determining initial values of

relative exposure or size, or both, of at least some of the pixels, and determining an

initial relative exposure or size, or both, of the digitally-detected image of said face

based on the initial values, and automatically adjusting values of the relative exposure

or size, or both, of pixels within the digitally-detected image of said face based upon

comparison of the initial relative exposure or size, or both, of said face with a desired

relative exposure or size, or both, of said face, and removing identification of said group

as corresponding respectively to one or more images of one or more faces, and wherein

the removing being performed by increasing a sensitivity level of said face identifying

within at least one low resolution image or said main image or both.

6.   As for **claim 21**, the prior art does not teach or fairly suggest the use of a method

of digital image processing using face detection to achieve a desired image parameter,

comprising generating in-camera, capturing or otherwise obtaining in-camera a

collection of low resolution images including an image of a face, tracking said face

within said collection of low resolution images, identifying a group of pixels that

correspond to said face within a digitally-detected main image based on the tracking of

said face within said collection of low resolution images, determining initial values of one

or more parameters of at least some of the pixels, and determining an initial parameter

of the digitally-detected image based on the initial values, and automatically adjusting

values of the one or more parameters of pixels within the digitally-detected image based

upon comparison of the initial parameter with the desired parameter, wherein the

identifying of face pixels is automatically performed by an image processing apparatus, the method further comprising adding an indication of another face within the image, and wherein multiple groups of pixels corresponding to multiple images of faces within the digital-captured image are identified after the adding, and the method further comprises performing automated processing of the multiple groups of pixels corresponding to the multiple images of faces including adjusting in a post-image capture process one or more values of one or more parameters of the multiple faces.

7.   As for **claim 23**, the prior art does not teach or fairly suggest the use of a digital image acquisition device, having one or more processor readable storage devices having processor readable code embodied thereon, said processor readable code for programming one or more processors to perform a method of enhancing parameters of a digital image as part of a post-image capture process using face detection within said captured image to achieve one or more desired image acquisition parameters, the method comprising determining default values of relative exposure or size, or both, of at least some portion of said digital image, determining the values of one or more camera acquisition parameters, generating in-camera, capturing or otherwise obtaining in-camera a collection of low resolution images including an image of a face, tracking said face within said collection of low resolution images, identifying a plurality of groups of pixels that correspond to said face within a digitally-captured main image based on the tracking of said face within said collection of low resolution images, and determining values corresponding to relative exposure or size, or both, of said

groups of pixels, and comparing one or more default values of relative exposure or size,

or both, with one or more captured values of relative exposure or size, or both, based

upon analysis of said image of said face, adjusting in a post-image capture process said

image parameters including adjusting said values of relative exposure or size, or both,

of said face, and removing as a false identification one or more of said plurality of

groups of pixels as corresponding respectively to one or more images of one or more

faces, and wherein the removing being performed by increasing a sensitivity level of

said face identifying within at least one low resolution image or said main image or both.

8.   As for **claim 27**, the prior art does not teach or fairly suggest the use of a digital

image acquisition device, having one or more processor readable storage devices

having processor readable code embodied thereon, said processor readable code for

programming one or more processors to perform a method of perfecting acquisition

parameters of a digital image as part of an image capture process using face detection

within said captured image to achieve one or more desired image acquisition

parameters, the method comprising determining default values of one or more image

attributes of at least some portion of said digital image, determining the values of one or

more camera acquisition parameters, generating in-camera, capturing or otherwise

obtaining in-camera a collection of low resolution images including an image of a face,

tracking said face within said collection of low resolution images, identifying a plurality of

groups of pixels that correspond to said face within a digitally-captured main image

based on the tracking of said face within said collection of low resolution images, and

determining corresponding image attributes to said groups of pixels, and comparing one

or more default image attribute values with one or more captured image attribute value

based upon analysis of said image of said face, and adjusting said camera acquisition

parameters including adjusting said image attribute values, the identifying of face pixels

being automatically performed by an image processing apparatus, the method further

comprising removing as a false identification one or more of said plurality of groups of

pixels as corresponding respectively to one or more images of one or more faces, and

wherein multiple groups of pixels that correspond respectively to multiple images of

faces within the digital-captured image remain identified after the removing, the method

further comprising performing automated processing of the remaining multiple groups of

pixels corresponding to the multiple images of faces including adjusting in a post-image

capture process values of one or more parameters of each of said multiple remaining

faces.

9.   As for **claim 30**, the prior art does not teach or fairly suggest the use of

a digital image acquisition device, having one or more processor readable storage

devices having processor readable code embodied thereon, said processor readable

code for programming one or more processors to perform a method of perfecting

acquisition parameters of a digital image as part of an image capture process using face

detection within said captured image to achieve one or more desired image acquisition

parameters, the method comprising determining default values of one or more image

attributes of at least some portion of said digital image, determining the values of one or

more camera acquisition parameters, generating in-camera, capturing or otherwise
obtaining in-camera a collection of low resolution images including an image of a face,
tracking said face within said collection of low resolution images, identifying a plurality of
groups of pixels that correspond to said face within a digitally-captured main image
based on the tracking of said face within said collection of low resolution images, and
determining corresponding image attributes to said groups of pixels, and comparing one
or more default image attribute values with one or more captured image attribute value
based upon analysis of said image of said face, and adjusting said camera acquisition
parameters including adjusting said image attribute values, and the identifying of face
pixels being automatically performed by an image processing apparatus, the method
further comprising removing one or more of said plurality of groups of pixels that
correspond to said image of said face, and wherein the manual removing of one or
more detected faces being performed by increasing a sensitivity level of said face
identifying within at least one low resolution image or said main image or both.

10.   As for **claim 35**, the prior art does not teach or fairly suggest the use of a digital
image acquisition device, having one or more processor readable storage devices
having processor readable code embodied thereon, said processor readable code for
programming one or more processors to perform a method of enhancing parameters of
a digital image as part of a post-image capture process using face detection within said
captured image to achieve one or more desired image acquisition parameters, the
method comprising determining default values of relative exposure or size, or both, of at

least some portion of said digital image, determining the values of one or more camera acquisition parameters, generating in-camera, capturing or otherwise obtaining in-camera a collection of low resolution images including an image of a face, tracking said face within said collection of low resolution images, identifying a plurality of groups of pixels that correspond to said face within a digitally-captured main image based on the tracking of said face within said collection of low resolution images, and determining values corresponding to relative exposure or size, or both, of said groups of pixels, and comparing one or more default values of relative exposure or size, or both, with one or more captured values of relative exposure or size, or both, based upon analysis of said image of said face, adjusting in a post-image capture process said image parameters including adjusting said values of relative exposure or size, or both, of said face, and wherein the identifying of face pixels is automatically performed by an image processing apparatus which receives relative values as to an estimated importance of different detected regions identified as faces within one or more low resolution images or the digitally-captured main image or both.

11.   As for **claim 37**, the prior art does not teach or fairly suggest the use of one or more processor readable storage devices having processor readable code embodied thereon, said processor readable code for programming one or more processors to perform a method of digital image processing using face detection to achieve a desired image parameter, wherein the method comprising generating in-camera, capturing or otherwise obtaining in-camera a collection of low resolution images including an image

of a face, tracking said face within said collection of low resolution images, identifying a

group of pixels that correspond to said face within a digitally-detected main image

based on the tracking of said face within said collection of low resolution images,

determining initial values of relative exposure or size, or both, of at least some of the

pixels, and determining an initial relative exposure or size, or both, of the digitally-

detected image of said face based on the initial values, and automatically adjusting

values of the relative exposure or size, or both, of pixels within the digitally-detected

image of said face based upon comparison of the initial relative exposure or size, or

both, of said face with a desired relative exposure or size, or both, of said face, and

removing identification of one or more of said plurality of groups of pixels as

corresponding respectively to one or more images of one or more faces, and wherein

the removing being performed by increasing a sensitivity level of said face identifying

within at least one low resolution image or said main image or both.

12.   As for **claim 45**, the prior art does not teach or fairly suggest the use of one or

more processor readable storage devices having processor readable code embodied

thereon, said processor readable code for programming one or more processors to

perform a method of digital image processing using face detection to achieve a desired

image parameter, comprising generating in-camera, capturing or otherwise obtaining in-

camera a collection of low resolution images including an image of a face, tracking said

face within said collection of low resolution images, identifying a group of pixels that

correspond to said face within a digitally-detected main image based on the tracking of

said face within said collection of low resolution images, determining initial values of one

or more parameters of at least some of the pixels, and determining an initial parameter

of the digitally-detected image based on the initial values, and automatically adjusting

values of the one or more parameters of pixels within the digitally-detected image based

upon comparison of the initial parameter with the desired parameter, wherein the

identifying of face pixels is automatically performed by an image processing apparatus,

the method further comprising adding an indication of another face within the image,

and wherein multiple groups of pixels corresponding to multiple images of faces within

the digital-captured image are identified after the adding, and the method further

comprises performing automated processing of the multiple groups of pixels

corresponding to the multiple images of faces including adjusting in a post-image

capture process one or more values of one or more parameters of the multiple faces.

Any comments considered necessary by applicant must be submitted no later

than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on

Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to CHRISS S. YODER III whose telephone number is

(571)272-7323. The examiner can normally be reached on M-F: 8 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Lin Ye can be reached on (571) 272-7372. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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Status information for unpublished applications is available through Private PAIR only.

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lin Ye/
Supervisory Patent Examiner, Art Unit 2622

/C. S. Y./
Examiner, Art Unit 2622